Notice of Allowability	Application No.	Applicant(s)	
	10/623,857	KOYAMA ET AL.	
	Examiner	Art Unit	
	Donna V. Lui	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3 Feb 2006*.

2. ☒ The allowed claim(s) is/are *1-3, 7-9, 13-14, and 17-18*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeffrey Costellia on February 23, 2006.

Claim 1, line 8, after "which counts", please insert -- the lighting period to obtain--

Claim 7, line 10, after "counting", please insert --the lighting period to obtain--

Claim 13, line 6, after "which counts", please insert --a lighting period to obtain--

Claim 13, line 6, after "pixel", please insert --, wherein the lighting period is corrected using the temperature characteristic and the ambient temperature--

Claim 17, line 7, after "counting", please insert -- a lighting period to obtain--

Claim 17, line 7, after "count unit", please insert --, wherein the lighting period is corrected using the temperature characteristic and the ambient temperature--

Allowable Subject Matter

1. Claims 1-3, 7-9, 13-14, and 17-18 are allowed.

2. The following is an examiner's statement of reasons for allowance:

As to **Claim 13 and 17**, broader than claims 1 and 7, Kwasnick (Pub. No.: 2003/0048243) teaches an organic light emitting display having a temperature detection unit, and a correction unit for correcting the integrated charge due to the lifetime (age) of the display and the impact of temperature. Kwasnick does not teach a storage unit for temperature and aging characteristics, a count unit for counting a cumulated lighting period of each pixel where the lighting period is corrected using the temperature characteristic and the ambient temperature nor does Kwasnick teach a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

Everitt (Patent No.: 6,963,321) teaches a storage unit for aging effects of an OLED element. Everitt does not teach a temperature detection unit, a storage unit containing temperature characteristics, a count unit for counting a cumulated lighting period of each pixel where the lighting period is corrected using the temperature characteristic and the ambient temperature nor does Everitt teach a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

LeChevalier (Pub. No.: 2004/0004590) teaches a count unit which counts the exposure clock edges which determines the exposure period (lighting period) for an OLED display which varies due to aging and temperature. LeChevalier does not teach a temperature detection unit, a storage unit containing temperature and aging characteristics, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

Feldman (Patent No.: 6,501,230) teaches a storage unit for digital aging correction values for an OLED display. Feldman does not teach a temperature detection unit, a storage unit

containing temperature characteristics, a count unit for counting a cumulated lighting period of each pixel where the lighting period is corrected using the temperature characteristic and the ambient temperature nor does Feldman teach a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

Yasue (Patent No.: 6,806,871) teaches a driver IC for electro-optical elements for temperature compensation. Yasue teaches a temperature detection unit, a storage unit for the temperature characteristics, and a counter unit for counting the clocks from the frequency dividing circuit. Yasue does not teach a storage unit for aging characteristics, a count unit for counting a cumulated lighting period of each pixel where the lighting period is corrected using the temperature characteristic and the ambient temperature nor does Yasue teach correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

Wakahara Toshio et al. (Pub. No.: JP 2001-134197) teaches a temperature compensating device for counting the duration of a lighting period to determine the temperature. Wakahara teaches a temperature detection unit, and a memory for storing data of the display due to temperature variations. Wakahara does not teach a storage unit for aging characteristics nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

Krah et al. (Patent No.: 6,753,856) teaches display correction to compensate for aging and environmental changes using a non-volatile memory for storing display characteristics during initial manufacture. Krah does not teach a count unit for counting a cumulated lighting period of each pixel where the lighting period is corrected using the temperature characteristic

and the ambient temperature, nor a correction unit for correcting a video signal using the aging characteristics and cumulated lighting period.

None of the prior art teaches a correction unit which corrects a video signal to be inputted to each pixel using the aging characteristic and cumulated lighting period and supplies the corrected video signal to the display panel.

The failure to have a correction unit leads to a failure to correct a video signal due to variations of the detected ambient temperature, temperature characteristics and aging characteristics.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna V. Lui whose telephone number is (571) 272-4920. The examiner can normally be reached on Monday through Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571)272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donna V Lui
Examiner
Art Unit 2675
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AMR A. AWAD
PRIMARY EXAMINER